

Group password and Login

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives

We will learn about



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- `newgrp` command



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- **newgrp command**
- **Securing a group with password**



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- **Securing a group with password**
- **Login to a group as group member**



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- `newgrp` command
- Securing a group with password
- Login to a group as group member
- Login to a group as non-member



System Requirements



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- **Ubuntu Linux 16.04 OS**



Pre-requisites

- **Please go through earlier Linux System Administration tutorials on <http://spoken-tutorial.org/>**



Pre-requisites

- **Please go through earlier Linux System Administration tutorials on <http://spoken-tutorial.org/>**
- **You must have root access to your computer**



Users already created:

- **suraj**
- **testmod**



newgrp command

- Used to change the current group ID during a login session



newgrp command

- Used to change the current group ID during a login session
- **Syntax:** `newgrp - Newgroup`



newgrp command

- Used to change the current group ID during a login session
- **Syntax:** `newgrp - Newgroup`
- **- and Newgroup are optional parameters**



newgrp command

- Newgroup is either a group ID number or a group name located in /etc/group



newgrp command

- Newgroup is either a group ID number or a group name located in `/etc/group`
- Newgroup may not be specified



newgrp command

- **newgrp refers to the file /etc/passwd for the particular entry of the user**



newgrp command

- **newgrp refers to the file /etc/passwd for the particular entry of the user**
- **Changes the current group to the default group listed in the file /etc/passwd for the user**



Optional Hyphen Flag



Optional Hyphen Flag

- **Re-initializes the user's environment as though the user has just logged in**



Optional Hyphen Flag

- Re-initializes the user's environment as though the user has just logged in
- Otherwise, the current environment remains unchanged



Login to a Password-less Group



Login to a Password-less Group

- If a group does not have a valid password set



Login to a Password-less Group

- If a group does not have a valid password set
- Then only a group member can use `newgrp - group` command to login to the group



Login to a Password-less Group

- If a group does not have a valid password set
- Then only a group member can use `newgrp - group` command to login to the group
- **Non-members cannot login to the group**



Secure Group with Password

- **Superuser or group administrator**



Secure Group with Password

- **Superuser or group administrator**
 - can use `gpasswd space Newgroup`



Secure Group with Password

- **Superuser or group administrator**
 - can use `gpasswd space Newgroup`
 - **to set or change the password of a group**



Secure Group with Password

- **Superuser or group administrator**
 - can use `gpasswd space Newgroup`
 - to set or change the password of a group
- **Newgroup: a group ID number or a group name that you have to write in the command**



Login to Password-secured Group



Login to Password-secured Group

- Even though the group has a password,



Login to Password-secured Group

- Even though the group has a password,
- **group members will not be prompted to provide the password while logging in**



Login to Password-secured Group

- If the group has a password set,



Login to Password-secured Group

- If the group has a password set,
- **Non-members have to provide the correct password in order to login to the group**



Note on Group Password

- If the user is root, he or she will not be prompted for a password



Note on Group Password

- If the user is root, he or she will not be prompted for a password
- If there is no group password set and the user is not listed as a member of the group



Note on Group Password

- If the user is root, he or she will not be prompted for a password
- If there is no group password set and the user is not listed as a member of the group
- Then the user will be denied access



Note on Group Password

Non-root users will be prompted for a group password if



Note on Group Password

Non-root users will be prompted for a group password if

- The user is not listed as a group member



Note on Group Password

Non-root users will be prompted for a group password if

- **The user is not listed as a group member**
- **The group has a password**



Note on Group Password

- **More than one person is permitted to know the group password**



Note on Group Password

- More than one person is permitted to know the group password
- So, group password has an inherent security problem



Note on Group Password

- More than one person is permitted to know the group password
- So, group password has an inherent security problem
- However, groups are a useful tool for permitting cooperation between different users



Summary

In this tutorial we learnt about

- **newgrp command**
- **Securing a group with password**
- **Login to a group as group member**
- **Login to a group as non-member**



Assignment

- **Create a new group accounts for college database**
- **Give a suitable password for the group created**
- **Create two users: rekha and sheetal**



Assignment

- **Check details of user rekha using the command `id`**
- **Add rekha as a member of the group**
- **Check how the user rekha can login to the group accounts**



Assignment

- Check how the user sheetal can login to the group accounts
- At every step, check the details of group accounts from `/etc/gshadow` file



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in **THIS Spoken Tutorial?**
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



Acknowledgements

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- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at:

<http://spoken-tutorial.org/NMEICT-Intro>



Thank You

Thanks for joining
<http://spoken-tutorial.org>

